

REMARKS

The above amendment is made in response to the Office action of November 29, 2004. The Examiner's reconsideration is respectfully requested in view of the above amendment and the following remarks.

Claims 14-20 have been canceled, without prejudice. Claims 1-8 and 10-13 have been amended. Claims 1-13 and new claims 21-24 are pending in the present application.

Claim Rejections Under 35 U.S.C. §102

Claims 1-13 stand rejected under 35 U.S.C. §102(b) as being anticipated by Nguyen et al. (U.S. Patent No. 5,914,202; hereinafter "Nguyen"). The Examiner has stated that Nguyen discloses all elements of the claimed invention.

In order to anticipate a claim under 35 U.S.C. §102, a single source must contain all of the elements of the claim. *Lewmar Marine v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert denied*, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1274 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Applicants have amended claim 1 to recite, *inter alia*, a polycrystallization mask including a first transmissive slit having a first light transmittance and a second transmissive slit having a second light transmittance, in which the first and second transmissive slits are isolated from each other by an opaque area. In other words, the polycrystallization mask of the claimed invention includes **first and second transmissive slits each having a different light transmittance and an opaque area disposed at surroundings of the first and second transmissive slits so that the first and second transmissive slits are isolated from each other by the opaque area**.

In contrast, Nguyen merely teaches a mask for a photolithography process (not for a polycrystallization). The mask of Nguyen includes a slit (opening 59) formed by etching an opaque film (56) and a partially transmitting film (54) placed on a substrate (52). *See* col. 6, lines 36-56 and Figs. 2-5. In other words, Nguyen teaches a

photolithography mask including a slit that has multiple, different light transmittances (here, two different light transmittances), which is formed by etching transparent and translucent layers differently. In Nguyen, each slit has a transparent region and a translucent region so that these two different regions have different light transmittances, respectively. By having such a slit with different transmittances, the mask of Nguyen can create a pattern having multiple thicknesses. See col. 9, line 61 to col. 10, line 8, and Fig. 13. In the mask of Nguyen, a single slit has the regions of different light transmittances so that it creates in a substrate subject to photolithography a pattern having layers of different thicknesses in accordance with the different light transmittances of the slit.

In the claimed invention, the mask for polycrystallization includes at least two transmissive slits each having a different light transmittance, and the transmissive slits are isolated from each other by an opaque area. In other words, the slits in the mask of the invention have different light transmittances, respectively, and each slit is isolated from other slits. Since the mask of the present invention is for polycrystallization, the transmissive slits of the different light transmittances are used to provide an amorphous silicon with different levels of Energy so that protuberances that otherwise would be formed during the crystallization are removed. In the claimed invention the first and second transmissive slits each have its own light transmittance and the slits are isolated from each other so that the first slit provides Energy of a different level than that of Energy provided by the second slit, while in Nguyen a single slit has multiple, different light transmittances to create a pattern of different thicknesses.

Thus, it is believed that Nguyen neither teaches nor suggests the polycrystallization mask as claimed in claim 1. Claim 1 is thus believed to be patentably distinct and nonobvious in view of Nguyen.

Claims 2-7 depend directly or indirectly from claim 1, and thus include all the limitations of claim 1. It is thus believed that the dependent claims are allowable for at least the reasons given for claim 1, which is believed to be allowable.

In regard to claim 8, Applicants have amended claim 8 to recite, *inter alia*, first transmissive slits each having a first light transmittance and second transmissive slits

each having a second light transmittance, in which the first and second slits are isolated from each other by first and second opaque portions, respectively.

As mentioned above for claim 1, in the photolithography mask of Nguyen a single slit has different light transmittances to create a pattern of different thicknesses, which teaches away from the mask of the claimed invention.

Thus, it is believed that claim 8 is patentably distinct and nonobvious in view of Nguyen. Claims 9-13 depend directly or indirectly from claim 8, and thus include all the limitations of claim 8. It is thus believed that claims 9-13 are allowable for at least the reasons given for claim 8, which is believed to be allowable.

Accordingly, Applicants respectfully request that the Examiner reconsider his rejections on claims 1-13 under 35 U.S.C. §102(b).

Newly Added Claims

Applicants have also added new claims 21-24 which include no new matter and are fully supported by the specification and the drawings of the present application. The new claims further define the distinct subject matters of the present invention. The new claims have been carefully written to avoid any questions under 35 U.S.C. §112. Accordingly, it is believed that the new claims are in condition for allowance.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration is respectfully requested.

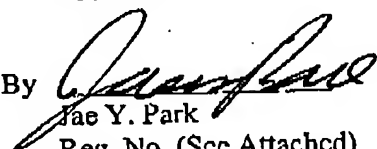
If there are any charges due with respect to this response, please charge them to Deposit Account No. 06-1130 maintained by Applicant's Attorneys.

The Examiner is invited to contact Applicant's Attorneys at the below-listed telephone number with any questions or comments regarding this Response or otherwise concerning the present application.

Respectfully submitted,

Cantor Colburn LLP
Applicants' Attorneys

By



Jae Y. Park
Reg. No. (See Attached)
Confirmation No. 1689
Cantor Colburn LLP
55 Griffin Road South
Bloomfield, CT 06002
PTO Customer No. 23413
Telephone: (860) 286-2929
Fax: (860) 286-0115

Date: April 29, 2005